WIND RIVER IRRIGATION PROJECT, COOLIDGE CANAL TROUT CREEK CROSSING STRUCTURE
(Little Wind River Unit)
Wind River Indian Reservation
Fort Washakie vicinity
Fremont County
Wyoming

HAER WY-95-A
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PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

HISTORIC AMERICAN ENGINEERING RECORD
INTERMOUNTAIN REGIONAL OFFICE
National Park Service
U.S. Department of the Interior
12795 West Alameda Parkway
Denver, CO 80228

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HAER No. WY-95-A

I. INTRODUCTION

Location:	The Coolidge Canal Trout Creek Crossing structure lies along Coolidge Canal and Trout Creek, approximately two miles west of the town of Ethete in the Fort Washakie vicinity. The structure is located within the Little Wind River Unit, Wind River Irrigation Project, Wind River Indian Reservation, Fremont County, Wyoming.
Quad:	Ethete, Wyoming
UTM:	Zone: 12; Easting 677865; Northing 4764286
Date of Construction	ca. 1905
Present Owners:	United States Government
Present Use:	The structure is currently inoperable as a result of years of minimal maintenance. The intended use includes regulating in-flow and out-flows from Trout Creek and along Coolidge Canal.
Significance:	The Coolidge Canal Trout Creek Crossing structure is an original component of the Coolidge Canal and the only crossing on the system. The Coolidge Canal, constructed in 1905, was the second government canal built in the Wind River Irrigation Project within the Wind River Indian Reservation.
Historian:	Joseph Randolph Bureau of Indian Affairs (BIA) Billings, MT June 2008

II. HISTORY

The Coolidge Canal Trout Creek Crossing Structure is an original component of the Little Wind River Unit, Wind River Irrigation Project. In 1894, the first authorized expenditure for irrigation construction was granted by the U.S. government. This expenditure resulted in the construction of the Ray Canal, named after the Indian Agent at the time. After 1894, irrigation system construction continued slowly. A second appropriation resulted in the proposed construction of the ditches near the Indian Agency. One of these ditches was built but was poorly designed and it eventually was abandoned. Two others may have never been built. Further appropriations led to the construction of the Coolidge Canal. In 1905 its construction was well under way. Construction of the Coolidge Canal was closely followed by extension of Ray Canal. From 1907 onward, numerous other irrigations systems were built on the reservation.

III. ARCHITECTURAL DESCRIPTION

Irrigation systems generally consist of three major components with supporting subcomponents and elements. The irrigation facilities and operational facilities components are permanent while construction facilities are temporary but no less necessary.

The Coolidge Canal Trout Creek Crossing structure is an irrigation facilities component (Figure 1). This component consists of containment and diversion structures, conveyances, regulating structures, water measurement and protection structures, dissipaters, and transitions. The Trout Creek Crossing structure was incorporated into the Coolidge Canal system as an added benefit to the system but was not necessarily required for the system to operate. Crossing structures may be rarely or commonly part of an irrigation system depending upon the needs. The Coolidge Canal Trout Creek Crossing is one of a few found on the Wind River Reservation irrigation systems. The placement of this structure was intended to allow water flowing down Trout Creek to either be diverted into the canal or to be directed back into the stream channel.

The Coolidge Canal heads at the Coolidge Turnout, a gated weir crossing the Little Wind River less than a mile west of the Trout Creek Crossing. Coolidge Canal is an earthen conveyance with graded embankments along its reach. The upstream side of Trout Creek flows into the canal following a few meandering, unregulated inlets. The Trout Creek flow is then regulated by the Trout Creek Crossing structure. Because of the dense vegetation, it is difficult to determine whether there was originally an earthen embankment along the upstream inlet at one time.

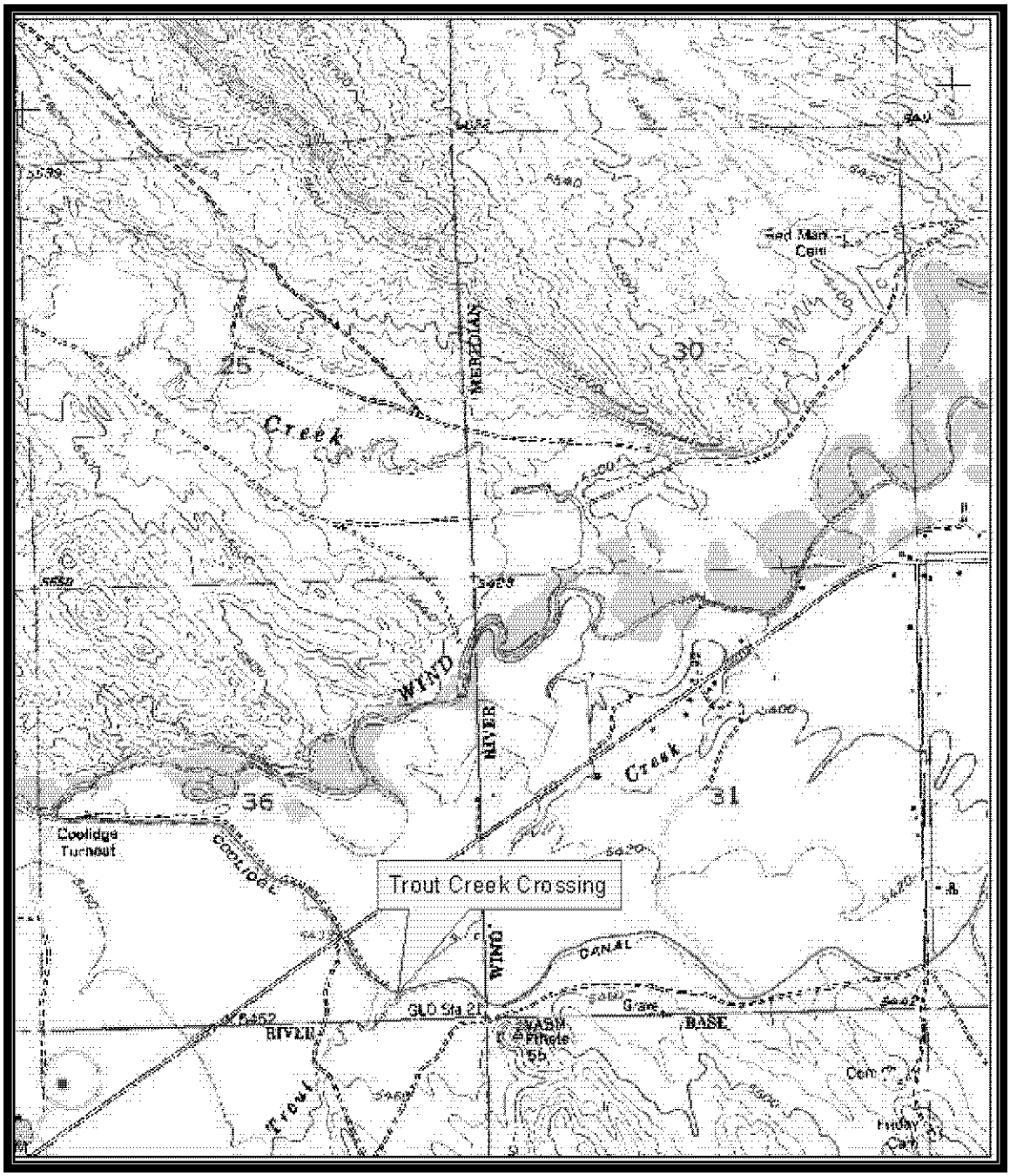

Figure 1. Coolidge Canal Trout Creek Crossing Structure Location.

The Coolidge Canal Trout Creek Crossing is a six-gated orifice check structure. Three gates crossing the canal were constructed at an angle to three gates crossing the Trout Creek flow. Originally each of the gate sections consisted of slide gates. However, the Trout Creek section has subsequently had its gates removed and stop logs have replaced the gates. This change may have been the result of deteriorating gate components. Both outlet structures are now deteriorated to the point that they no longer function as containment or regulating structures.

The two outlet works have been constructed a little differently. The Coolidge canal outlet works contains a short concrete transition that continues into the canal with a rip-rap and rubble section. The structure also has a concrete stringer bridge as a cap. The Trout Creek outlet works has a short concrete transition and the channel is edged with rip-rap for a short distance. This structure is capped with a concrete and plank stringer bridge. The canal maintenance road is connected by this bridge.

IV. MODIFICATION

The most outstanding modification has been the removal of the slide gates on the Coolidge Canal Trout Creek Crossing structure and replacement with stop logs. There is no known date of this conversion.

V. OWNERSHIP AND FUTURE

The U.S. Government has maintained ownership of the Coolidge Canal system since its original development.

The replacement of the Coolidge Canal Trout Creek Crossing Structure is part of the BIA Irrigation Rehabilitation Programs, Wind River Irrigation Project. This is a multi-year project with plans to return various irrigation systems throughout the Rocky Mountain Region to functioning systems.

The replacement Coolidge Canal Trout Creek Crossing structure is similar to the original with minor changes. The three slide gates on the Coolidge Canal and stop logs on the Trout Creek structures will be replaced with single radial gates for each structure. The concrete and plank stringer bridge joining the service road across Trout Creek will be concrete. The concrete stringer bridge across Coolidge Canal will be eliminated, replaced with a concrete service walkway. The downstream transitions will not change.

VI. BIBLIOGRAPHY

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